

# MACDONALD JOURNAL

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AGRICULTURE

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EDUCATION



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RD. Wilson

## THE TERRITORIAL IMPERATIVE AND THE FAMILY FARM

BY TOM PICKUP — PAGE 8

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THE MACDONALD LASSIE



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**Cover: — The St. Jacques Bridge.** According to reports, there are over 150 covered bridges still in use in New Brunswick. The best known of course is the one at Hartland, which happens to be the longest covered bridge in the world. About four miles out of Edmunston, this bridge crosses the Madawaska River at the small village of St. Jacques not far from the Quebec border. — Artwork courtesy of Bank of Montreal.





## centennial plus one

Student riots, sit-ins, sleep-ins, national harmony, civil rights, social unrest — that seems to be the face of Canada in January, 1968. It is not a happy face but one which holds promise for maturity. If Canada can survive the debates and discussions of critical issues and can channel social unrest into productive action, then we will all share in the new society. But 1968 promises to be a critical year for Canada.

The primary debate will focus on the development of new political relationships between the provinces and the Federal government. In recent years, this has led to major complications in Ottawa life. Yet, if concern is paid to the B.N.A. Act and if the establishment of a Federal government is necessitated by common concerns of the provinces, then the provinces are justified in demanding their rights, responsibilities — and money. In a country as diverse as Canada, one policy should not be forced on all people. Nova Scotians are different from Albertans — that's why we have provinces.

The desire for strength in provincial governments is spearheaded by Quebec. In view of the great strides made by Quebec and with concern for the many great changes yet to be made, this is natural. As the Hon. Art Sequin, MLA (Robert Baldwin) stated, "When Ontario and other provinces were developing policies for industrial expansion, we in Quebec

were placing colonists on arid farms in our northern sections, and this before roads and communications were established".

Yet much of this lack of progress in Quebec was blamed on "les Anglais". The use of the word "English" is bothersome as we participate in this debate. The English come from England, we are Canadians. Maybe we are from Poland, or Russia or China, but we *are* Canadians. Yet these seems to have been the idea that the two cultures in this country are French-Canadian and English. Should not these be represented as French speaking Canadians and English speaking Canadians?

In 1968, there will, it is hoped, be a sharing of this word Canadian. It is hoped that the Quebecer will shed his centuries of inferiority complex and will demonstrate his pride in being a part of Canada. It is hoped that any revised constitution will not emphasize the differences between two nations, but will focus on our similarities. It is hoped that any constitutional changes will reflect the rights of the individual provinces and yet create a unifying force on the national level with national concerns. It is hoped that, as Mr. Sequin stated, "certain hot headed political empire builders will not be permitted to barter our economy for certain very doubtful political liberties".

Could be an exciting year — 1968.  
*The Editor*



# nitrogen

by A. F. MacKenzie

*With the increasing production of essential fertilizer elements in Canada, especially nitrogen and potash, prices are likely to decrease and use will increase.*

*Because of this, the Journal is presenting the three-part series entitled*

NITROGEN — PHOSPHORUS — POTASH.

Nitrogen, the pivotal substance in protoplasm, is the most illusive of all fertilizer elements. This very transient nutrient in the living soil is present mainly in the organic form but is used by plants in the inorganic form. Knowledge of soil nitrogen and how it becomes available to plants is essential for crop production. Research can supply many of the answers about soil nitrogen, its forms, its usefulness to crops, its disadvantages, and its losses.

For example, how much nitrogen is actually needed by various crops? 150 bushels of corn may require 240 lbs. of nitrogen, 80 bushels of oats may require 70 lbs., 20 tons of sugar beets 150 lbs., and 4½ tons of alfalfa grass hay will require 170 lbs. of nitrogen. In fact, nitrogen is required in larger amounts than any other nutrient by most of our normal agricultural crops. Exceptions include some of the high starch vegetable crops.

How much nitrogen does the soil contain? A nice general number is 5,000 lbs., of nitrogen per acre. However, the form in which this 5,000 lbs. is present is mainly organic and the kind of organic compounds are not completely understood. A lot of this nitrogen, as much as 30%, may be present in microbial bodies, either alive or dead. Another 30 to 50 percent may be combined in forms that have not been identified. The remainder of the nitrogen can be broken down into materials that are probably fragments of proteinaceous compounds added to the soil as plant or animal tissue. These proteinaceous breakdown products include amino acids, amides, and other compounds. They are, however, generally combined with other complex carbon-containing compounds in the soil. We have a tremendous variety of nitrogen-containing compounds in the soil.

How are these nitrogen compounds converted to nitrogen for plant growth? As a general rule one to two percent of the 5,000 lbs. of nitrogen in the soil is converted to mineral nitrogen every year. The actual amount converted will depend on a number of things; for example, the *pH* of the soil should be neutral for maximum mineralization of nitrogen. Soils must be well aerated and not waterlogged. There must be a good energy source for the microorganisms because it is these busy cells with their voracious appetites which are actually consuming the organic matter and releasing the nitrogen.

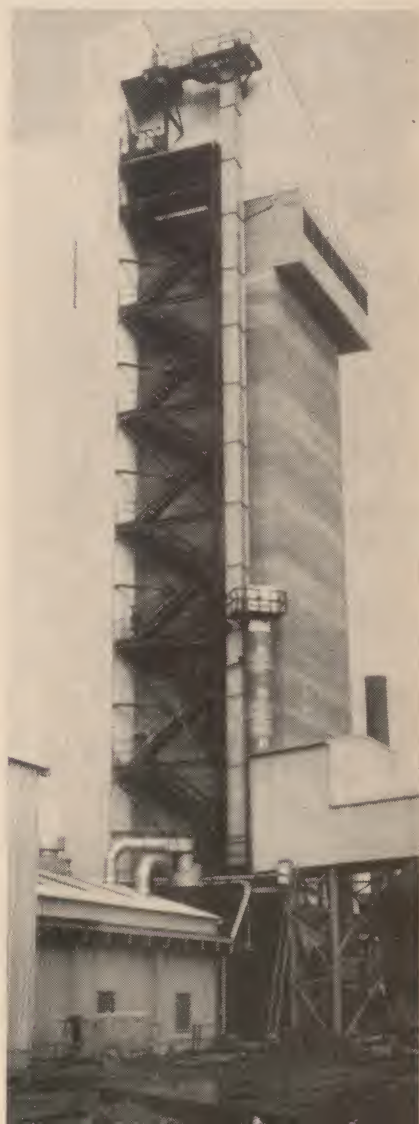
In the Department of Soil Science we are working on the problem by adding nitrogen to soils and measur-

ing rates of nitrogen increase, by determining crop requirements and by looking at the total nitrogen cycle in the field. Studies on corn over an eighteen-month period indicated that from some 37 to 84% of the added nitrogen could be found either in the plant or in the soil. The remainder of the nitrogen must have been lost either through leaching or through conversion of nitrogen to gaseous compounds. If these losses could be reduced, then we would be able to make more efficient use of our nitrogen fertilizer. This increased efficiency could be brought about by plants which develop good vigorous root systems that will not let nitrogen move on by. Also, work indicates that crop residues will help tie up nitrogen so that it will not be leached and lost from the soil.

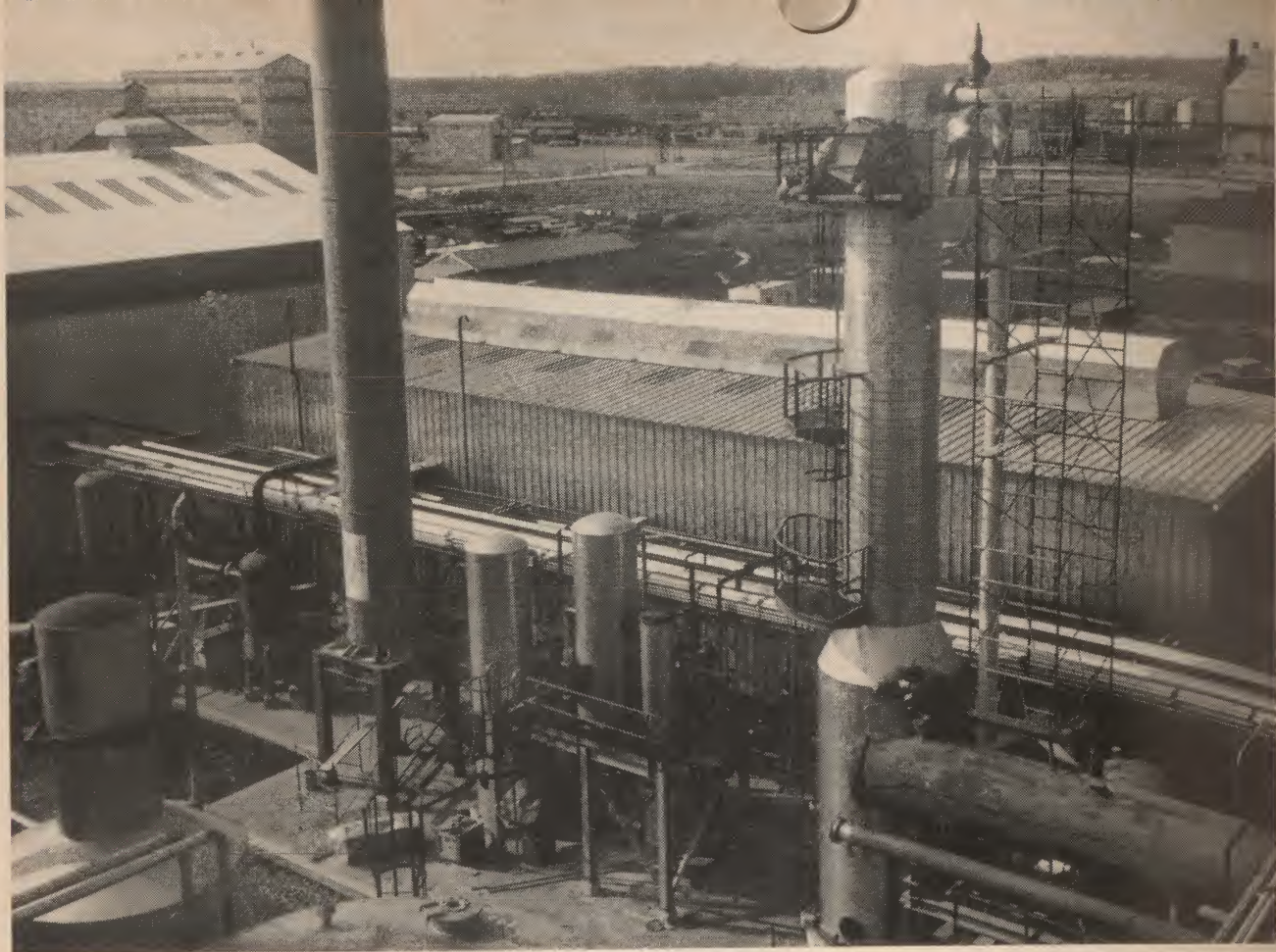
Nitrogen fertilizer is built into microbial bodies when crop residues are present. This nitrogen is later released for crop growth.

A second problem is to find out how much nitrogen will be mineral-

Urea drill tower







The new production facilities built by Cyanamid of Canada Limited at Welland, Ontario produce 700 tons of ammonia per day and 300 tons of urea.

ized over a growing season. If this amount of nitrogen can be predicted then fertilizer needs can be determined with great precision. This is not a simple problem. We have tried to simulate field conditions by storing soils in the laboratory under controlled temperature and moisture and seeing how much nitrogen is produced this way for crop growth. We have also studied the amounts of the various nitrogen compounds in the soils to see if there is any compounds or combination of compounds that are easily decomposed to release mineral nitrogen. Mr. Kadirgamathaya, a graduate student in the Department of Soil Science, has recently carried out an interesting series of experiments to study these problems. He grew *Sudan Sorghum hybrid* grass in the greenhouse for eight weeks on a series of 20 soils. For each soil he determined the rate of nitrogen production under ideal laboratory conditions, the amount of the various proteinaceous or other nitrogen compounds in the soil, and the increase in grass yield from added nitrogen fertilizers. Samples of the soils were treated with acid under high temperatures for twelve-hour periods to break down the various nitrogen

compounds into simpler compounds. This *hydrolysis* process was used to measure amino acid nitrogen, *hydrolysable* ammonium nitrogen and total *hydrolysable* nitrogen along with *hexosamine* nitrogen. Amounts of amino acid nitrogen were closely related to amounts of nitrogen uptake in the grass and to response to nitrogen fertilizers. Also *hydrolysable* ammonium nitrogen was related to nitrogen uptake and response to fertilizers. *Hexosamine*/nitrogen was less related to nitrogen uptake. Inorganic nitrogen contents and ammonia were important during the early stages of plant growth and Amino Acid nitrogen and the *Hydrolysable* ammonium nitrogen were important in the later stages of growth. However, the contribution of the nitrogen compounds varies with different soils.

Unfortunately, *hydrolysable* nitrogen is difficult to determine, extremely time consuming and not readily adaptable to routine soil testing. A boiling water extraction method recently developed in the United States and several laboratory incubation methods were tried. The incubation methods were good in predicting the amount of increased crop growth

with added fertilizer. However, the incubation methods worked best if carried out for a period of at least six weeks, again making them unsuitable for a rapid soil test procedure. The boiling water extraction method and the inorganic nitrogen content of the soil at the time of testing were the best bets for good soil-test methods.

But why the emphasis on the prediction of exact fertilizer requirements? Why should we worry when the price of nitrogen is steadily decreasing? Why can't we just put on plenty of nitrogen and go for maximum yields?

It is certainly true that nitrogen prices are going to drop. The production in North America is going up at a remarkable rate. Recently an ammonia plant went into production at Sarnia with a daily output of 1,000 tons of ammonia. All new nitrogen plants will be at least of this size because turbine compressors can be used. Turbines are much more efficient. Also, production is linked with some large oil refineries where hydrogen gas can be used to combine with the nitrogen in the atmosphere to produce the ammonia. World plant capacity in 1970 is estimated at



51,000 tons, considerably greater than estimated fertilizer needs. Now, in the Gulf states of the U.S. nitrogen is available at 5 cents a pound. Whether we ever get to this price level in Canada is conjectural but certainly we are going to drop from the present 12 to 16 cents a pound that we now pay. So why worry about the excess nitrogen?

Excess nitrogen readily moves down through the soil and enters the ground water. From there it moves into wells and into streams and lakes. Nitrate nitrogen can be a deadly poison if present in too high quantities. Nitrates in ground water have reduced real estate values of land drastically in some areas of the U.S. Nitrates can come from manure produced in feed-lots as well as from fertilizers. Less severe cases cause an increase in the nitrogen content of rivers and lakes and an increase in the biological growth in these lakes. This produces the choking growth of weeds and large amounts of algae that can ruin water resources. Thus, if we are to prevent pollution we must watch our nitrogen fertilizer levels.

In any event, nitrogen is probably the key nutrient to crop production in most areas of Quebec. Nitrogen causes increased protoplasm, increased leaf area, increased chlorophyll. All these things are necessary if we want to trap more sunlight and convert it to crop yields. As nitrogen prices decrease we are going to see larger and larger amounts used as crop fertilizer. Let us hope that we use this nitrogen well. We have a lot of people to feed.

# Review 1967 outlook 1968

by Department of  
Agricultural Economics

## EDITOR'S NOTE

*An enlarged version of this Outlook Statement will be presented in the next issue of the Journal. At that time projections will be made for specific commodities.*

In 1967, we appeared to have emerged from a major economic readjustment. The first two quarters of the year were marked by a slowdown in growth but not what one would call a recession, and in the latter part of 1967 we have renewed the strong expansion that has characterized the Canadian economy in recent years. Canada appears to have followed the United States in the longest expansion in economic history, now, November 1967, in its 81st month. The growth in the past year has been somewhat erratic but the direction has been upwards and we project further expansion in the forthcoming year.

In this long expansion we have tended to under-estimate GNP growth in the following year. Those of you who have followed our review and outlook projections may have thought our projections were over optimistic. In 1966, for instance, we predicted 9 per cent growth and 10.8 per cent was realized, of which 5.9 per cent was growth in volume. For 1967 we projected 7½ to 8 per cent and when the figures are all in it looks as if GNP will be up 8 to 8½ per cent in current dollars of which 4 to 4½ per cent is volume. This latter projection assumes that the last quarter continues strong. There are a number of factors in the picture that support this, including a larger wheat crop that was predicted by D.B.S. The full analysis will come in our forthcoming review 1967, outlook 1968. But let us indicate, the pound devaluation notwithstanding and all the dire projections about slowdown, that in Centennial plus 1, namely 1968, we

project a GNP of greater than 8 per cent, say 8½ per cent, of which 5 to 5½ per cent will be increase in volume and 3 to 3½ per cent will be increases in prices. We are not as optimistic about the employment situation. Thus, where the unemployment rate was under 4 per cent in 1967 it may average 4 per cent or a little higher in 1968. Merchandise imports and exports increased in the past fiscal year and we project further growth in 1968. Our full analysis will explain and lay out our assumptions regarding the projection. This projection is one of which we attach a high probability of attainment if the situation as we have observed in the past year continues much the same as in 1968.

As for the agricultural picture it will be, in general, somewhat less optimistic in '68 than has been the case in '67 particularly for those segments of Canadian agriculture that are dependant on export markets. For those segments of agriculture dependant on the domestic market, the outlook varies with the demand-supply situation with respect to each item. The wheat and feed grain situation is clouded by the potential weakness in world market prices brought about in the main by the stated intention of the United States that their agricultural program is changing and they are about to unleash the output of their vaunted agricultural capacity on the world market. Thus we anticipate that world market prices for items like wheat, oats, barley, corn and related grains will fall as indeed they have in 1967 and further downward price adjustments are anticipated in 1968. A freer world market, however, in part brought about by the Kennedy round tariff agreements should aid Canadian farm producers. The cost picture in 1968 for Canada's grain farmers as well as all other farmers is not encouraging. Prices will rise at least 3 if not 4 per cent. About the only cost item that we do not project to increase is the price of feed grains. Dairy product prices are projected to increase, thanks in part to government programs and in part due to the increasing proportion of total milk moving into class one uses. Some strengthening is projected in beef cattle prices, in part due to lower feed costs and the cattle inventory situation both in Canada and the United States. Hog prices have been lower this year than in '66, some price improvement is projected at least through to the fall of '68: prices then will depend on how Western farmers have reacted to lower grain prices, lower delivery quotas and poorer grain export prospects.

**The next two articles in this series, those dealing with phosphorous and potash will appear in subsequent issues of the Journal.**

## FARM FOR RENT

200 acres of tilled land, 75 head pole barn, 4 stall milking parlour, two pit silos, horse barn, grain and fertilizer storage, implement shed, farm house with apartment. Rent free for three years to someone showing evidence of ability, experience and good management. The farm is located in the Eastern Townships, near markets, lake and skiing area. Reply to Macdonald Farm Journal, Box 237, Macdonald College, Que. Mark "Confidential" on the envelope. Outline qualifications, and experience, age, marital status, etc., in first letter. Do not send references but state who would give them.



# we are what we eat

by *Celia L. Fergusson*  
*Lecturer in Foods*  
*Macdonald College*

This body of ours, for the most part, is the product of the food we take into it. It could, in a sense, be thought of as a manufacturing plant in miniature, as it takes in materials in one form and utilizes them or converts them to some other form. This other form is you — for better or worse.

Not only does the food we eat become us in the physical sense, but also influences our feeling of well being. The right foods can make the difference between a feeling of health and vitality and of just dragging ourselves around. How much easier it is to face the cares of the day when feeling full of vim and vigour than when feeling like a wet rag.

Food does three things in the body. It supplies materials for the body's building and repair. It provides regulators that enable the body to use other materials and to run smoothly. It provides fuel for the body's energy and warmth.

## Protein

Certain specific substances must be supplied in the foods we eat in order that these requirements can be met. One of the most important of these substances is protein, for this is the main material of the body's muscles, organs, skin, hair and other tissues. The best quality proteins are supplied by such items as meat, poultry, fish, eggs, milk and cheese. Proteins of lower quality are in cereals, legumes and nuts. Proteins are made up of varying combinations of twenty-two simpler materials called amino acids. The top quality proteins supply all the amino acids our body requires, while the lower quality proteins are lacking some of these. However, in combination with other foods these lacks may be remedied. When the body takes in the protein food it breaks it down into its various amino acids and from these builds up its own particular proteins.

## Minerals

A number of minerals are essential to the body and these are likely to be supplied in a varied diet, with the possible exception of calcium, iron and iodine. Attention should be given to supplying sources of these three in the diet. Calcium is required in the formation of bones and teeth. Milk and cheese are good sources of calcium. Iron is a necessary constituent of hemoglobin of the blood and in compounds present in cells of body tissue. Good sources of iron are the organ meats, eggs, whole grain cereals, molasses, spinach. Iodine is a constituent of the thyroid hormone.

Sources of iodine are salt-water fish, foods grown near the sea and iodized salt.

## Vitamins

If a variety of foods is eaten it is pretty certain that the vitamin requirements will be met.

Vitamin A is important for growth. It is necessary for normal vision and has a function in maintaining a health condition of the skin. Good sources of this vitamin are liver, butter, fortified margarine and the green and yellow vegetables.

A number of B vitamins are known, but the best understood are thiamine, riboflavin and niacin. An irritable, nervous person with little appetite, no energy and vague complaints may be manifesting the effects of lack of the B vitamins. A well rounded diet containing meat, eggs, milk, whole grain cereals, fruit and vegetables will assure an adequate supply of the B vitamins.

Years ago sailors on long voyages would suffer from scurvy; it was found that this disease could be prevented if lemons, limes or oranges were included in the diet. Later it was discovered that their illness resulted from a lack of vitamin C, or ascorbic acid. This vitamin is necessary for maintenance of health and some source of supply must be contained in the daily diet. Citrus fruit bountifully supplies ascorbic acid. Other good sources are tomatoes, canned or fresh, tomato juice, vitaminized apple juice, strawberries, cantaloupe, cabbage, broccoli and many other fruits and vegetables.

Vitamin D is of great importance to the growing child as well as to pregnant women and nursing mothers. Vitamin D works with calcium and phosphorus to form straight, strong bones and sound teeth. A serious lack of this vitamin in the diet of a young child results in rickets. In older people a deficiency can cause changes in the shafts of bone with a softening of bone structure. We can get vitamin D both from food sources and by sunshine on our skin. The sun's rays can change certain substances in the skin to vitamin D. Good food sources are salt-water fish, egg yolk and milk and margarine to which vitamin D has been added. However the 400 International Units of vitamin D required by growing children and expectant and nursing mothers can best be provided as cod liver oil or some other concentrate during the winter months.

The primary role of fat in the diet is a source of energy. Besides this certain fats carry vitamin A or



D and also help the body make use of them. Some fats and oils contain fatty acids believed essential for good nutrition.

## Fat

Some fat is required daily, but the total amount should be moderate. Fat is supplied in vegetable oils, meats whole milk and its products, egg yolk as well as in the many instances where fat is combined with other foods in their preparation.

Other energy foods are sugars and starches. For the body's energy for work or play or simply to keep warm, fuel must come from food. Calories are the units in which food energy is measured. All foods supply calories but fats, supply more than others. When the body gets more food energy than it can use it stores it up as

excess fat and weight is gained. Thus the so called "secret of keeping slim" is no secret at all, but simply taking a supply of calories in the right amount to give the energy the body requires.

From this analysis of nutrient requirements the planning of an adequate diet may perhaps appear to be a rather complex procedure. In practice it is far from complicated. In a country such as ours with its vast food supply it simply amounts to including a variety of foods in our daily meals. We are sometimes prone to following a set eating pattern which may possibly be missing out in some essentials, as perhaps we do not think very deeply about what we are eating.

Canada's Food Guide gives an excellent check list by which to review our eating habits.

### CANADA'S FOOD GUIDE

THESE FOODS ARE GOOD TO EAT  
EAT THEM EVERY DAY FOR HEALTH  
HAVE THREE MEALS EACH DAY

#### MILK

Children (up to about 11 years)	2½ cups (20 fl. oz)
Adolescents	4 cups (32 fl. oz)
Adults	1½ cups (12 fl. oz)
Expectant and nursing mothers	4 cups (32 fl. oz)

#### FRUIT

Two servings of fruit or juice including a satisfactory source of vitamin C (ascorbic acid) such as oranges, tomatoes, vitaminized apple juice.

#### VEGETABLES

One serving of potatoes  
Two servings of other vegetables preferably yellow or green and often raw.

#### BREAD AND CEREALS

Bread (with butter or fortified margarine)  
One serving of whole grain cereal

#### MEAT AND FISH

One serving of meat, fish or poultry  
Eat liver occasionally  
Eggs, cheese, dried beans or peas, may be used in place of meat  
In addition, eggs and cheese each at least three times a week

## Rural Youth Discuss Programs

Twenty-three rural young people participated in a youth exchange program between Alberta, Ontario and Quebec last summer. They travelled, they studied and they had a good time meeting other young people.

They found out about programs available to rural youth in other provinces. This group of young people have many good ideas. They were anxious to express them when they attended a week-end workshop at the McGill Center on Mount St. Hilaire, December 1 - 2 - and 3rd. The theme of this workshop was "Youth Programs in Quebec". These young people put their ideas together and came up with what they think rural young people need. This workshop was organized by the young people themselves and the staff of the Extension Service at Macdonald College.



**Cane Molasses  
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more money  
faster.**

10



Mr. Chester A. Ronning, a special Canadian representative to Saigon and Hanoi in 1966 presented the address at the twenty-first Annual Memorial Assembly at Macdonald College on November 27th. Mr. Ronning spoke on the question, "Can the West Exist With China?"



# THE FAMILY FARM

PUBLISHED IN THE INTERESTS OF THE FARMERS OF THE PROVINCE BY  
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Agriculture and Colonization

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## The Territorial Imperative and the Family Farm

By T. PICKUP

In an interview reported in the *Family Herald* (November 9th, 1967) Mr. J.J. Greene said, "It is imperative that conditions be made easier for farmers to move into larger economic units, and that the means necessary to make the change be available. I am convinced that a new concept of the family farm is also required. At the same time the family farm structure must remain the basis of the industry and should be given priority assistance, whether it be for a one-generation family farm, a father-son arrangement, or a family corporation."

"What's so special about the family farm?", it may be asked — meaning a farm owned and operated by a man and his family with perhaps some hired help, as most of the farms in North America are. Never having seen a corporation, state, or collective farm or a kibbutz or even a rented or share-cropped farm, the average Canadian and certainly most Quebecers may wonder what other or better kinds of farm there could be. After all, aren't three quarters or more of the farms in North America family farms and doesn't the North American farmer produce enough food to feed

himself and about thirty-five other people besides? The Russians with their huge state farms (averaging 70,000 acres and 800 salaried workers) and collective farms (with 15,000 acres and 400 families each) buy wheat from us; and the small proportion of privately farmed land in Russia (3% of Russia's cultivated land) made up of plots averaging half an acre which the peasants are allowed, produces about half of all the vegetables, milk and meat, three quarters of the eggs and two thirds of the potatoes eaten in Russia. So it looks as if the privately owned family farm is highly efficient when it comes to producing food.

Nevertheless, the family farm comes in for plenty of criticism: too small, expensive to operate, excessive investment in machinery, and even Thoreau's old jibe about the farm owning the farmer instead of the other way around, and so on; while, on the other hand, the large-scale, mass-production enterprise seems to have all the operational advantages, at least in theory.

However, in a book published in 1967. "The Territorial Imperative" the author, Robert Ardrey, gives some really basic reasons why the family farm is, in practice, the most effective farming unit.

He believes that if we are to understand human beings, their motives and behaviour, we must take into account the part of their nature that they share with animals. One of the powerful, inborn urges we share with many animals, he believes, is attachment to territory (or "territoriality"), that is to say the "impulse to maintain and defend a territory". He writes:

One can recognize its workings in the fury of Finland attacked by a monstrous large enemy; in the madness of Hungarians attempting to reassert their land's integrity; or in the lonely, irrational heroism of the Battle of Britain . . . These were defensive actions taken in strict accordance with territorial law and deriving from profound instinct the unbelievable magnitude of their energy.



Aline Nadeau of St-Odilon, Dorchester, seems to personify the spirit of the awakening year, so she has been chosen to wish everybody a Happy New Year.

One of Quebec's family farmers — Florian Côté of Sainte-Brigitte-des-Saults, Nicolet, on his land.





Among many instances of this profound attachment to territory and the mysterious homing instinct in animals and birds (even in planarian worms) the author cites a study of the beaver made by Glenn W. Baradt:

The male beaver pairs for life. The pair establish a territory. It must be large enough to offer permanent food supply, but if it is too large they will be unable to work it economically. The mother has one litter of kits a year, usually four in number. And so the population consists of the kits of the season, the yearlings of the previous season, and the pair. Two-year-olds are never found in a colony. When next season's kits are born, this season's yearlings will leave or be driven out. The homeplace cannot support them.

Just how hard the beaver works to maintain his territory and colony may be judged from the records of one of Bradt's colonies:

There were six beavers. In 353 days they cut down 1040 trees, hauled them to the pond, stripped them, cut them into segments, and used them either for construction, for the evening meal, or for storage in the pantry. If the beaver does not have four conditions in his life — permanence of site, an assured supply of wood, a limited population in a single colony, and a willingness to work hard — he cannot attain real success. He has solved all four through the pair territory . . . Why the possession of a territory should be a source of extra energy in the proprietor is a mystery . . . which science may never solve.

Mr. Ardrey suggests that there are three basic needs underlying the behaviour of all higher animals, including man, namely: for identity, for stimulation, and for security. Contrariwise, one might say that we are impelled to avoid anonymity, boredom and anxiety. He mentions the theory of an American psychologist that, just as the lack of a vitamin can spread disorder through the body, so the starvation of a basic need will spread disorder through mind and emotion. He believes that the possession of territory satisfies all three of these basic needs.

There are few institutions, animal or human, that satisfy all three needs at once (but) besides the security and the stimulation . . . which territory provides . . . it provides identity. 'This place is mine; I am of this place', says the albatross, the patas monkey, the green sunfish, the Spaniard, the great horned owl, the wolf, the Venetian, the prairie dog, the three-spined stickleback, the Scotsman, the skua, the man from La Crosse, Wisconsin, the Alsatian, the little-ringed plover, the Argentine, the lungfish, the lion, the Chinook salmon, the Parisian. I am of this place which is different from and superior to all other places on earth and I partake of

its identity so that I too am both different and superior, and it is something that you cannot take away from me despite all afflictions which I may suffer or where I may go or where I may die. I shall remain always and uniquely of this place.

In his conclusions, the author makes an interesting comment on present-day social unrest which sounds something like what many farmers have been thinking for a long time:

In general, however, our means of satisfying innate needs are precious few, and the sacrifice of any must mean replacement by another. We may agree, for example, that the smoking of cigarettes is dangerous to health; yet unless we provide alternative stimulation, we shall have little luck in stamping out the addiction through appeal to security, weakest of all needs. We may agree, for example, that our societies must provide greater security for the individual; yet if all we succeed in producing is a social structure providing increased anonymity and ever-increasing boredom, then we should not wonder if ingenious man turns to such amusements as drugs, housebreaking, vandalism, mayhem, riots, or, at the most harmless, strange haircuts, costumes, standards of cleanliness, and sexual experiments. He is achieving identity otherwise denied him, discovering excitements socially unavailable.

And in the last paragraph of this thought-provoking book, Mr. Ardrey writes:

It is a matter of surpassing remark, when you come down to think about it, what a change in the landscape occurs when you have made a place of your own: how the shape of an oak tree emerges in the darkness . . . ; how the stars shine brighter . . . ; how the sound of some running brook — it must be a long way off — chants its quiet cadence; how the smells rush at you . . . the smell of leaves, green leaves dampened by dew, but of other leaves also, old leaves, last year's fallen leaves, that sweet, soft odor.

## Prolongation of the April Commission's Mandate

The Minister of Agriculture and Colonization, Mr. Clément Vincent, announces that the government has granted a second extension to the mandate of the Royal Commission on Agriculture under the direction of Mr. Nolasque April.

Mr. Vincent explained that the government has found it necessary to grant this new deferment at the Commission's request in view of the delays already encountered in the preparation of the Commission's final report, which is now due to be submitted by April 30th 1968.

# Assistance Policy

## Premium for initial Seeding of land held Under location ticket

*Land-clearing and Premiums division of The Province of Quebec Colonization Service*

With the object of helping agricultural settlers to sow for the first time, land which has been cleared or ploughed, for the purpose of growing hay, the Minister of Agriculture and Colonization has decided to grant a subsidy at the rate of \$5 per acre.

## Eligibility

1. This premium is for the benefit of resident settler-farmers holding land under location ticket or having an establishment composed of a number of pieces of land held under location ticket and situated within a maximum radius of three miles of the farm of residence which, however, will not itself be eligible for the premium if it has already been patented.

2. The aforesaid land or establishment, including patented land if any, must have less than sixty per cent of its area (and not more than 120 acres) under cultivation.

## Conditions

1. Land for which the premium is claimed must be situated entirely on land(s) held under location ticket and must have been seeded, for the first time, before September 1st of the year for which the premium is payable.

2. The seeding must have been done with forage seeds of good quality, preferably timothy and clover.

3. The premium will be payable when the inspector finds that the seeds are well sprouted.

4. This premium is inalienable and unseizable and is also not liable to any deduction or stoppage for reason of indebtedness to the Department. The Deputy Minister of Agriculture and Colonization  
Roméo Lalonde  
Quebec, April 1st 1967





*This view taken at Saint-Anselme in Dorchester County gives an idea of the size and shape of Quebec farms.*

## Number and Size of Farms in Quebec

The central region of Canada (Quebec and Ontario) contained 44 per cent of all census farms and 41 per cent of all commercial farms in Canada in 1966. Eighteen per cent of the total Canadian farm acreage was in this region. From 1961 to 1966, there was a decline of 12 per cent in the number of all census farms and 6 per cent in the farm acreage in

these two provinces combined. In contrast, there was a 4 per cent increase in the number of commercial farms and a 10 per cent rise in the area in these farms. During the same period, the average size of all census farms in Quebec and Ontario advanced by 7 per cent to 161 acres and the average size of commercial farms increased by 6 per cent to 186 acres. These were somewhat lesser rates of change than those which occurred in the Maritimes.

The number of larger-size farms (240 to 559 acres) in Quebec and Ontario — and in Prince Edward Island — also increased between 1961 and 1966, but declined in all other provinces.

### Quebec

The total farm area fell by 9 per cent from 1961 to 1966. In the northern county of Témiscamingue, farm acreage increased by one per cent but all other counties showed reductions in the land used for agriculture. The acreage in commercial farms in the province increased by 14 per cent but approximately one-third of the counties showed de-

creases in the commercial farm acreage.

The number of census farms in Quebec declined by 16 per cent from 1961 to 1966. The only exception was in Iles-de-la-Madeleine where the number rose by 34 to a total of 256 farms in 1966. There was an overall 8 per cent increase in the number of commercial farms in the province.

Although the overall change in average size of census farms for the province was an increase of 8 per cent, many counties did not follow this trend. The counties of East Charlevoix, Iles-de-la-Madeleine, Joliette, Lévis, Maskinongé, St. Maurice and Terrebonne had smaller farms in 1966 than in 1961. Industries other than agriculture predominate in these areas. The largest increases in average farm size were in the Gaspé peninsula, in dairying areas near urban centers and in the northern counties of Abitibi, Témiscamingue and Saguenay.

The average size of commercial farms also increased during this five-year period. Generally, most counties showed a rise of about 6 per cent. The largest percentage increases occurred in the counties of Quebec, Verchères and Saguenay.



# Germination of 10,000-Year-Old Seeds Reported

In plants, seeds of many species exhibit the ability to remain alive (viability), often under adverse conditions, for varied lengths of time; but now it seems that a new record has been established. In the journal *Science* (Vol. 158, p. 113), three Canadians—A. E. Porsild and C. R. Harington of the National Museum of Canada and G. A. Mulligan of the Canadian Department of Agriculture, Ottawa—relate the discovery of seeds of the arctic lupin, *Lupinus arcticus*, in the Yukon Territory. Although at least 10,000 years old, some of the seeds have been successfully germinated and grown in the laboratory.

During mining operations at Miller Creek, during July 1954, a mining engineer, Mr Harold Schmidt, discovered a system of burrows made by rodents in the frozen silt. These burrows, between 3 and 6 metres below the surface of the silt, which itself was 8 to 12 metres thick, were excellently preserved. They contained skulls and skeletons of the rodents, later identified as the collared lemming, and a number of seeds, probably originally set down as a food store.

The seeds attracted little attention but were kept for 12 years, fortunately under dry conditions, before being handed over to a staff member of the National Museum of Canada when he visited the area. On reaching the authors of the *Science* article, the two dozen seeds in the sample were readily identified as being those of the arctic lupin. When tested, 6 of the seeds germinated after 48 hours on wet filter paper and have produced normal plants. One of the plants has even developed flowers.

Rodent burrows have previously been found in the frozen organic silt, laid down in the late Pleistocene age (10,000-200,000 years ago). By carbon-14 dating the animal remains were estimated to be around 15,000 years old. The collared lemming, whose remains were found with the seeds, is a species of the arctic and high alpine tundra, and so we must suppose that they left Miller Creek during the time when that area first experienced the post-glacial warming which occurred about 10,000 years ago. The seeds of the arctic lupin,

then, are at least 10,000 years old.

It is difficult to say why some seeds, such as the arctic lupin, can stay alive for 10,000 years, whereas others do not survive for more than a few. Clearly, a number of factors are involved—genetical, morphological, physiological and environmental. Many of the longest-lived seeds are, like the lupin, species of the *Leguminosae*. Plants in this family often bear seeds which have thick, almost impermeable seed coats which confer a degree of protection to the embryo inside. When freshly harvested, such seeds often will not germinate unless the seed coat or testa is broken, and even 1000-year-old seeds of *Nelumbo* had to be treated in this way. On the other hand, those seeds with thinner, more permeable seed coats tend to be shorter-lived; this is one reason why the experts have treated tales of germinating wheat from Tutankhamen's tomb with some disbelief.

The permeability of the testa governs the moisture content of the seed, and the moisture content determines the extent to which metabolism in the seed can proceed. The greater the metabolic rate, the shorter the period of viability. The humidity and the temperature are, then, the two most important environmental factors affecting viability, and for a long life, seeds are best kept in cool, dry conditions.

If moisture and temperature are so important, how did the arctic lupin seeds survive for so long? The temperature, of course, presents no problem; in present times the air temperature in the Yukon is below 0°C for six-and-a-half months of the year. We might expect, however, that a lemming burrow would be poorly ventilated and damp. To explain how conditions arose which preserved the viability of the lupin seeds the authors suggest that the burrow was buried when the surrounding earth was still frozen. This could have occurred by some natural catastrophe such as a landslide or the deposition of volcanic ash. The effect would be to provide an insulating layer, preventing the thawing of the soil, and maintaining the air in the burrow at a relatively low level of humidity.

The changes which occur in seeds, tending to reduce viability, are not known with certainty. In many cases nuclear aberrations are common, and various chromosomal abnormalities are observed. The metabolism, albeit slow, which proceeds when seeds are damp, is undoubtedly responsible for the slow breakdown of enzyme protein.

The lupin seeds buried in the preserved burrows have survived against unlikely odds. That they were able to do so, and produce healthy plants, is a striking example of the remarkable property of the cells of some plant organs to remain alive in a dry, seemingly dead state, for many years. We know almost nothing of how this is possible. The lupin seeds have told us no more; but they have illustrated the phenomenon rather generously. (From "New Scientist")

## Message to Farm Beautification Contestants

The Farm Beautification Contest officially ended on October 23rd with the announcement of the names of the prizewinners and distribution of awards in the DuPont Auditorium at Expo '67 presided over by Mr. Clément Vincent.

Although the Government of Quebec, through the Department of Agriculture and Colonization, distributed the substantial sum of \$100,000 in prizes (in addition to medals and diplomas) it has found it impossible to reward all of the thousands of contestants who made thoroughly deserving efforts to embellish their farms during the competition.

The Minister of Agriculture and Colonization wishes to thank all those who took part in the contest and to congratulate them on their ambition to beautify their farms. Apart from any other compensations, they will have found a fitting reward for their work in the improvement of the appearance and value of their property.

The expression of the spirit of order and neatness stimulated by the contest greatly helped to make the Quebec countryside more attractive during Expo '67 and, at the same time, brought charm and happiness to the lives of those who live in it.

Mr. Vincent earnestly desires that the work of beautification started in the contest will be continued in the years to come and personally urges the entrants to keep up the effort they have begun.



# Agriculture has Benefited most from ARDA in Quebec



*Uneven land and varying soil type (ranging from clay to muck) complicate farming operations in the Lower St-Lawrence valley, where ARDA funds are being used to help farmers. Here, Mr. Albert Pelletier of Luceville, Rimouski, tries to plough a straight furrow.*



*Farms are rarely far from the sea in the Gaspé, where ARDA funds are being used to raise living standards. Here is the farm of Mr. Guy Samuel at Rivière-au-Renard with part of the fishing harbour in the foreground.*

Between April 1st 1966 and March 31st 1967, the Quebec ARDA administration allotted \$13,803,049 to raise living standards in rural areas of Quebec. Of this sum, over \$5,000,000 was spent on agriculture. In announcing these figures, Mr. Clément Vincent, the minister responsible for applying federal-provincial agreements for rural improvement and agricultural development in Quebec, pointed out that farming benefited more than any other activity from ARDA funds in 1966-67.

In 1965, Quebec signed a second cost-sharing agreement with the federal government under the Agricultural Rehabilitation and Development Act for the purpose of preparing and carrying out plans to improve economic and social conditions in rural areas. The agreement is for five years. Between the signing of the first agreement in 1963 and April 1967, Quebec has undertaken to spend about \$52 millions in ARDA funds, of which approximately half will be repaid by the federal government.

## Use made of ARDA funds

In 1966-67, the government of Quebec used ARDA funds in a number of ways to reclaim and develop human and material resources in rural areas. The measures taken include occupational and leadership training programmes and research in the fields of tourism, fisheries, forestry and agriculture.

The table shows expenditures under ARDA in Quebec in the different sectors in 1966-67 as compared with the expenditures in 1965-66.

It will be seen that nearly three million dollars more was spent in 1966-67 than in 1965-66. The amounts allotted to tourism were much bigger, ARDA-Quebec having assisted the Department of Tourism, Fish and Game to improve camping conditions in connection with Expo '67. Because 1966-67 was the year in which Quebec's Economic Advisory Council and ARDA-Quebec wished to analyze the socio-economic studies, the sums spent on this item were then much smaller. It should be pointed out that amounts spent on research are included in the expenditure for the sector concerned.

## ARDA in Quebec

The Quebec ARDA administration (ARDA-Quebec) is part of the administrative structure of the Department of Agriculture and Colonization and, in collaboration with other government and municipal departments and



## ARDA EXPENDITURES IN QUEBEC

	1966-67	1965-66
Agriculture	\$ 5,839,323.00	\$ 5,828,046.31
Tourism and recreation	1,803,389.23	429,414.76
Occupational and leadership training and public participation	85,690.00	200,849.48
Soil and water conservation	505,355.50	531,907.09
Transport	29,095.22	1,212.30
Socio-economic studies	744,388.70	1,868,567.99
Manufacturing industries	1,920,681.21	331,307.40
Forestry	655,506.45	560,493.55
Fisheries	1,759,454.70	826,812.99
TOTAL	13,342,884.31	10,578,611.87
Canadian Soils Inventory	460,164.87	360,186.13
GRAND TOTAL	13,803,049.18	10,938,798.00

bodies, it studies and plans ARDA projects and negotiates the sharing of their cost with Ottawa. The projects are then submitted to the Permanent Committee on Resource Development which advises the minister responsible for ARDA about the use of ARDA funds and coordinates the efforts of the ministries and other bodies interested in carrying out the projects. The Permanent Committee on Resource Development includes the deputy ministers of seven ministries and the general director of the Economic Advisory Council.

In practice, all the ministries are interested in the application of the ARDA act because it concerns rural development in general and because projects under it cover a wide range, including inventories of resources, socio-economic studies, research, reclassification of labour, training and education of personnel, development of agricultural, forestry, hydraulic and tourist resources, and industrial development.

The role of ARDA-Quebec in relation to the ministries and bodies concerned with development is one of stimulation and coordination but is not an executive one. ARDA projects are implemented by the ministries concerned, or under their supervision if they are carried out by municipal or other bodies.

### The pilot region

In 1966-67, the Plan for the development of the Lower St. Lawrence, Gaspé and Magdalen Islands region that the Eastern Quebec Planning Bureau had devoted three years to preparing was submitted to the Quebec government. In view of the unique nature of the experiment conducted by the Bureau and the new approaches

to regional development which it opened up, the submission of this plan was an important step for the Quebec-ARDA administration.

Since the plan was submitted, a Regional Development Council has been formed in the pilot area, a coordinator for the implementation of the plan has been appointed, and an administrative conference is to be convened in the near future. Prior to this — on October 22nd 1966 — the Quebec government had already announced the completion of twelve priority projects at a cost of nearly \$6 million and, subsequently, on September 26th 1967, a five-year schedule was announced, comprising some forty programmes and calling for expenditures totalling about \$250 millions.

### Increased Aid Under ARDA

Assistance paid to agriculture under ARDA increased more than 42 per cent 1956-66. The provinces of Quebec and Saskatchewan were the largest recipients of Federal aid during the year. The current ARDA agreement, effective April 1965 to April 1970, provides for up to \$25 million annually to be made available by the Federal Government, with a further \$50 million fund to be used for major projects over the five-year period. (Canadian Farm Economics)

## New Deputy Minister and Reorganization in the Department of Agriculture and Colonization

The minister of Agriculture and Colonization, Mr. Clément Vincent, has announced the appointment of Mr. Lucien Bissonnette as assistant deputy minister. He has also announced the setting up of two big new divisions within the organization of his Department, namely a Production and Development Branch under Mr. Bissonnette, and a Marketing Branch under Mr. Gilles Ledoux who now becomes general director of marketing while retaining his post as vice-president of the Agricultural Marketing Board.

Mr. Bissonnette, who has occupied different positions since he came to the Department in 1959, will have as his immediate assistants two experienced men in Mr. Léon Sylvestre, an agronome, and Mr. Camille Julien, a veterinarian.

In the new organization, Mr. Roméo Lalande, the Deputy Minister of the Department, will continue to attend to its general administration, and Mr. Benoît Lavigne, the associate deputy minister, will be concerned with agricultural policy.

Mr. Vincent has also announced the formation of a directing committee comprising, in addition to the minister and deputy ministers, Mr. Hubert Hurtubise, president of the Quebec Farm Credit Bureau, Mr. Roméo Martin, president of the Crop Insurance Board, Mr. Gilles Ledoux, and Mr. Patrice Boudreau, the director of the Information Service.

In announcing the changes, Mr. Vincent stressed that they were the first phase in a reorganization in depth of the whole department based on four cardinal points: agricultural development, farm financing, information, and marketing. He also pointed out that the services concerned with these four aspects of agriculture are immediately represented on the Department's directing committee whose task, he said, would be to ensure coordination of efforts and policies designed to provide farmers with all the services they have a right to expect from an efficient and up-to-date Department of Agriculture.



Mr. Vincent, who is the minister responsible for ARDA in Quebec, has also announced two important appointments in the Quebec-ARDA administration, Mr. Gabriel Béland, notary, and Mr. Irenée Marsolais, a professional engineer, being named as assistant directors to Mr. Jean-Baptiste Bergevin, the assistant deputy minister responsible for the administration.

Mr. Bissonnette, who is fifty, is a native of Saint-Thomas d'Aquin in Saint-Hyacinthe county. He obtained his bachelor's degree at Oka in 1942 after specializing in animal husbandry and became in turn a farm manager, poultry instructor, and manager of the poultry division of the Granby Poultry cooperative. He then took charge of the technical side of the Granby feed mill and, in 1956, was engaged by the E.W. Caron company of Montreal where he was in charge of feeding systems. In 1959 he joined the Quebec Department of Agriculture and was concerned with the poultry industry, then with production and with marketing and extension services.

Mr. Gilles Ledoux was born in Magog in 1924. Following his classical studies at Quebec and university education in mutual association at Ottawa and in translation at Montreal, he entered the service of the Union Catholique des Cultivateurs in which he was secretary and organizer and later head of the secretary's office and director of farm products' marketing. Since 1964, he has been a member and vice president of the Agricultural Marketing Board.

## The Future and Farm Organizations

The Quebec Farmers Association are taking a careful look at their future role. This was very evident at their annual meeting. Where does a small organization fit into the rapid advancing and ever increasing capital and management requirements of today's agriculture? The answer is not easy.

This problem is not confined to Quebec. Galen Driver of the Macdonald Extension Service recently attended a three day conference in Aurora, Ontario. This conference was organized by the youth committee of the Ontario Federation of Agriculture. You can guess the topic "The Future Role of Farm Organizations in Ontario". This conference was very successful; thirty young progressive farmers attended and made their needs known.



## Macdonald College Royal

College Royal — What does it stand for? The answer to this and other questions concerning College Royal are probably as many and as varied as the people who ask them. This fact in itself is probably one of the most important virtues of the organization. To any of the students who work with or on the committee, the function serves to bring them into contact with many situations where they will have to make decisions for themselves, just as they will have to do when they have completed their college education.

The Macdonald "Royal" began as a College version of the Royal Agricultural Winter Fair which is held in Toronto each year. Over the years it has developed into a College-wide display, at which the students show their fellow students and a host of visitors what is involved in the preparation for their professions, and what their disciplines are all about.

Since it is strictly a show organized and operated by the students, the trends the Royal has followed have been chiefly guided by the population of the students in the different divisions of the student body. Twenty-one years ago when the first Royal was organized there were many more students enrolled in the Faculty of Agriculture and in the School of Household Science than there were in the Faculty of Education. Arising from this fact and its connection with the "Winter Fair" in Toronto, the "Royal" was a show very heavily orientated towards agriculture.

Since that time and particularly in the 1960's, the size of the Faculty of Education student body has grown to a position where they now take a very active part in the production of the College Royal. The aims of Sir William C. Macdonald when he founded Macdonald College was to have three schools — Agriculture, Household Science and Teacher Training and involve them with "The advancement of education, the carrying on of research work and investigation and the dissemination of knowledge," and in no other organization or function on the campus do these three work more closely together towards a common goal, than as a College Royal Executive and Board of Directors.





Since the first Royal there have been many changes and this year is no exception. We plan to eliminate the booth exhibits as a unit and to put more emphasis on departmental displays and demonstrations throughout the college building complex. Because College Royal covers many aspects of every-day life, it has a wide appeal. We want to show the public what the students of Macdonald College are doing to make use of the most advanced methods in research and education.

Events such as the Physical Education Students' Gymnastic Demonstration, the Royal Fashion Show and the Livestock Competition are some highlights that will take place this year. The Green and Gold Revue, a production presented for the enjoyment of the public by the students of the college will be staged again this year in conjunction with College Royal activities. In addition we will

have something new by way of a Synchronized Swimming Demonstration put on by the Physical Education students.

The Royal will be held this year on Friday, February 23rd and the afternoon of Saturday, February 24th. However, competition begins with a Tractor Rodeo in the early Fall and during the week of the Royal student "bake-off" competition is planned. The Royalty of 1967 will crown Her Majesty, The Royal Queen of '68 at the Royal's Semi-Formal held on February 21st and Her Majesty will preside over College Royal proceedings for 1968.

The theme of this year's Royal is "Macdonald — Where the Action Is" and there will certainly be plenty of action for everyone at the '68 Royal. See you there on February 23rd and 24th.

Marven Armstrong  
Publicity Director

## What's New at The College Farm

Mechanized feeding has come to our dairy herd. The newly constructed feedlot is now in operation. The cows seem to enjoy the daily exercise. As expected a change from the conventional winter-feeding operation will create some problems. Surprisingly enough the problems are not cow-problems but rather people-problems. The feeding-methods we have used in the past are so deeply engrained in ourselves that we find it difficult to unlearn and adopt the new system of feeding.

## College News

Several publications dealing with education are available to the general public. Two deserve special consideration for those interested in research and development as related to Quebec. *Education Weekly* is published by the Quebec Department of Education, Box 40, Parliament Buildings, Quebec. This bulletin is sent free of charge to any person or institute requesting it. The *McGill Journal of Education* is published twice a year, at a cost of \$2.00. Contact Professor H. D. Morrison, Business Manager, McGill Journal of Education, Macdonald College, Quebec.

## Macdonald College at the Salon of Agriculture

February the 8th is the day, the new Place Bonaventure in the heart of downtown Montreal is the place for this year's National Salon of Agriculture. Again this year, the exhibit from Macdonald College will have a prominent location in the center of the exhibit area at Place Bonaventure.

With the continued expansion of the Dairy Herd Analysis Service, it was thought that new developments in this Service should be reported. Rather than having a working computer unit in the display, a special remote data processing unit will be installed. This will be connected with the Computer Center at McGill's downtown campus where the actual analysis of the data submitted at the Salon will be done.

Again this year, the College exhibit will be a cooperative venture with the Bank of Montreal.

With the use of the Place Bonaventure, this year's Salon of Food and Agriculture promises to supersede anything done previously. In addition to the exhibits at Place Bonaventure, a major portion of the Salon will be staged at the Maurice Richard Arena.

Over the years, the Salon has continued to grow to the point where it is impossible to have all the activities under one roof. It is hoped that this year's Salon will capitalize on the experiences in display and exhibit techniques gained from Expo. If this is the case, then this year's Salon of Food and Agriculture promises to outshine all the past Salons. We'll see you there.

## Community Schools in Prince Edward Island

People throughout the Province of Prince Edward Island have responded beyond all expectations to a new venture in Adult Education for that area.

Community Schools have multiplied from a modest three schools two years ago, to 13 schools last winter involving some 1400 participants. The Prince Edward Island Rural Development Council expects to assist with the organization of 20 to 25 Community Schools this winter. Rudy Dallenbach from the College farm is closely associated with the development of this program.



# Women's Institutes



Norma Holmes  
Quebec Women's Institute

**ABITIBI: Matagami:** Successful card-party held. Three new members welcomed. A wreath has been purchased from the legion (Canadian). A donation given to the library honoring the memory of Mrs. Brown (a W.I. member). Flowers sent for funeral of the late Mrs. Baker.

**BROME: Abercorn:** Roll Call: Name an outstanding Canadian and tell where he lived and some of his most outstanding features. The county president addressed this meeting, telling about the two W.I. members from England who visited her. While here they attended EXPO. They gave her a copy of their opening Ode used in England, which is Jerusalem.

**Austin:** Paper given by citizenship convenor on UNICEF. Donation to UNICEF service fund; Christmas party for school cafeteria and Cecil Butters Hospital. County president, the treasurer with one W.I. member from Sutton were guests. Report on the visit to Clairol plant in Knowlton. Bursary for grade VIII awarded to Nancy Bryant (\$50) for Grade XI awarded to Ann McAuby (\$100). **South Bolton:** Roll Call: Name a Canadian man or woman and give details on his or her station in life. Ways and means discussed for making money. The county president, Mrs. G. Patton, and treasurer, Mrs. Patton, were present. The president spoke on some of the business at hand and read a poem. Names were exchanged for Christmas gifts. Get-well cards sent to members who are in hospital. **Sutton:** Every member answered the roll call by bringing a gift for a veteran in the hospital at St. Anne-de-Belle-vue. A picture donated by Mr. James Cowan was raffled and winner was Mr. Cecil Carr. Contest on an old-fashioned garden of flowers won by Mrs. D. Mudgett.

## **CHATEAUGUAY-HUNTINGDON:**

**Dundee:** Packed two large boxes of used clothing for Unitarian service committee. **Hemmingford:** Had movie 'One Day's Poison'; Dr. Paul Belanger, M.D. conducted question-and-answer period after film; also gave additional statistics of child poisoning. Waist measurements taken: one cent on inch, with this money to be sent to Northern Extension fund. **Howick:** Demonstration given by Mrs. Evelyn Lamb on desserts, using jello and fruit combinations. Tea biscuit contest, all using a given recipe.

**COMPTON: Cookshire:** Discussions on 1st: Triticale — a new wheat; 2nd:

drug taking without advice of doctor; 3rd: Donald Morrison, the Megantic Outlaw; 4th: a résumé of semi-annual held at Scotstown; 5th: Review of services rendered by the U.N. followed by an open discussion. Activities: a wreath bought to be placed at the Cenotaph in town park on Armistice Day; prize money given to the Cookshire School. Bursary of \$50 given jointly by Cookshire and East Angus W.I.s.

**Scotstown:** Slides of Expo and local spots shown by a member; entertained the county semi-annual in October; donated to the Northern Extension Fund; gift given to a member who was leaving. **Canterbury:** Successful silent auction held; wreath purchased for Remembrance Day; sick member given a gift by members and all members present signed a get-well-card. Planned Christmas cheer boxes for shut-ins. **East Angus:** meeting was attended by 15 members and 10 visitors. Two new members joined. Orders taken for UNICEF cards; spoke about the adult education course to be held at Cookshire. Article read 'Your Food and Drugs Are Her Business' in which Miss E. Ordway tells of her work. Guest speaker, Mr. Thorn, student minister, spoke on why he gave up the business world to enter ministry. **Brookbury:** Donations given to each of two cemeteries; shared on a wreath for Remembrance Day; sent rose-bowls to each of two sick members; completed arrangements for sunshine baskets for December meeting.

**GATINEAU: Kazabazua:** Sponsored a service in Queen Elizabeth School on Nov. 10th. Bought poppy wreath for this service. Held successful rummage sale, completed plans for baskets for shut-ins among the senior citizens.

**JACQUES CARTIER: St. Annes:** Dr. Florence Farmer, of School of Household Science, Macdonald College, spoke on comparative values of food and their caloric content. St. Annes W.I. members meet in the city hall council room and as there was an emergency meeting (council) for part of the evening the W.I. members were interested spectators.

**MEGANTIC: Inverness:** roll call — suggested ways to increase membership. A contest held on parliamentary procedure. Plans made to repair and paint the bulletin board.

**Kinnear's Mills:** Roll Call What I found most interesting at Expo or the most interesting article read about Expo '67. Contest with a time limit of five minutes to make as many words as possible from "Confederation" winner was Mrs. Russell Rothney. Donation given to UNICEF. Successful card party held. Mrs. George Rothney



made and donated a quilt, tickets were sold and the winner was Mrs. Edgar Nugent.

**MISSISQUOI: Cowansville:** Roll Call describe a welfare project: cards and flowers sent to ill members; held exhibition and demonstration on needle-point. **Fordyce:** all attended meeting in old-fashioned dress; observed moment of silence in memory of Canadian heroes in two world wars; read "In Flanders Fields" as a prayer. Purchased poppies. Held contest on household measures and exchanged names for Christmas. Canvassed for UNICEF and paid service fund.

**Stanbridge East:** Each member read extracts from article on "Things Canadians have in Common", and afterwards sang O Canada. Reports on Centennial spoons project showed excellent returns.

**MONTCALM: Rawdon:** Had a demonstration of Christmas parcel wrapping by the president, Mrs. Copping, which, judging by the 'rapt' attention was much appreciated. A new member who was in charge of entertainment for the evening, with the able assistance of her sister and a friend, provided a delightful hour of 'fun' with songs (in German), and contests which caused considerable hilarity and gave a light and refreshing touch to the meeting. Donated \$15 to the Northern Extension Fund and sent in money for 'Pennies for Friendship'.

**PONTIAC: Quyon:** Seeking government assistance towards the introduction of facilities for 'slow pupils' in both schools in Pontiac. **Wyman:** Two representatives spoke to us from the regional school board. Explained changes being made in our school system; the advantages of vocational and technical and commercial courses being offered. Members have planted 300 tulip bulbs. \$10 donation to muscular dystrophy. **Shawville:** re Centennial Project, final decision on the size of welcome sign for Shawville. One life membership and two twenty-five year pins presented. Members enjoyed a dinner in a restaurant in the area.

**Clarendon:** Had Superintendant of Pontiac Community Hospital address the meeting. Donation of \$100 to hospital. Plans made for fiftieth anniversary; collecting for the blind; slides of EXPO shown. **Briston:** Paper on pre-school children and welfare; planting trees in park. Held card party

**Port Coulonge:** roll call — bring an antique and tell a story on it. Household hints, slides on EXPO shown by a member, thank you letter from Save the Children Fund for 23 Christmas Stockings.

**QUEBEC: Valcartier:** In connection

with Remembrance Day an article on "Peace" was read by the President, Mrs. Hicks. Donation to the Q.W.I. Service Fund. A donation to the "Dunn School" for retarded children was discussed. The program was under the convenorship of publicity and the roll call was 'What impressed us most at EXPO'. A sing-song was held and a poem 'Around the Bend' was read by publicity convenor.

**RICHMOND: Cleveland:** displayed a copy of the newspaper "The Globe" dated July 1st 1867. Held a quiz on 'What do you Know' conducted by citizenship convenor. Plans made to make as applique quilt for inter-branch competition at the fair. **Gore:** Sold poppies at meeting. Donation to Quebec Service Fund W.I. pins were purchased by several members. Citizenship convenor read an article "Quebec can't afford public strikes". Awarded two prizes to Grade 1 pupils for essays written on centennial topics. Each member to bring a gift for a patient in Douglas Hospital at December meeting. **Melbourne Ridge:** had a demonstration on making the centennial symbol form cardboard triangles. Collected Pennies for Friendship and for UNICEF. Donated \$25 to the Cecil Butters Memorial Home. Members purchased poppies; catered to banquet for the legion on Remembrance Day. **Richmond Hill:** Held a chicken-pie supper and dance; a drawing was made on a quilt. Placing of wreath on Cenotaph. Donation to county funds and to service fund. Sent get-well cards, bought poppies, gave gift to small girl with a broken arm. **Richmond Young Women:** Donated to welfare fund at St. Francis High School; to UNICEF and to Cecil Butters Memorial Home. Demonstration on liquid embroidery by Mrs. Blake. **Spooner Pond:** 25 members responded to roll call by buying poppies. Placed wreath at Cenotaph. Two articles made by children at the Dixville Home for Retarded Children were shown, and a donation of \$10 was sent to this home to help towards Christmas gifts. Money sent to service fund. Collected for pennies for friendship and for birthday money. Plans made for committee to work on the inter-branch quilt competition. Sales table held as ways and means project.

**ROUVILLE: Abbotsford:** At this meeting we brought jellies for the Montreal diet dispensary had a food sale and a white elephant table.

**SHERBROOKE: Belvedere** Roll call: wear a poppy and bring a gift for cancer patient. Program was in charge of the citizenship convenor, who told of a trip to Dundurin Castle in Hamilton, Ontario, which was built in the early days of confederation, by the

prime minister of Canada Sir Alban Napier McNab. The castle is now used as a museum. A jumbled word contest with prizes was conducted by the convenor. A rummage sale was held recently and a sale of poppies took place at the meeting in aid of the Canadian Legion. **Ascot:** Financial assistance for the party at the high school on Hallowe'en given for the children who were out collecting for UNICEF. Orders were taken for UNICEF cards. Members were asked to bring two each of four varieties of vegetables. These to be judged and first and second prizes awarded. The vegetables were then auctioned and the money raised sent to UNICEF. The branch is sponsoring a card marathon with fifteen tables playing.

**STANSTEAD: Ayers Cliff:** Visited the ROZYNKA Pottery shop in Ways Mills, a most educational tour. Mrs. L. Naeve of Hatley spoke on 'Arts' and illustrated with articles of carving, painting and tapestries which she had made. **Beebe:** Roll Call: Something I would like to learn and what I enjoyed most at EXPO. Citizenship convenor, Mr. Boisvert, read a very interesting article entitled "Etiquette for Canada's National Flag". It was education meeting and three teachers attended and explained the new methods of teaching, saying it was a great challenge for both pupils and teachers. **Hatley:** Guests were Ayres Cliff, North Hatley and Hatley Center W.I. branches in September at the home of Mrs. Sharman. Mrs. R. Knight gave a most interesting report on the leadership course held at Macdonald in May. Wreath to be placed at the Cenotaph on Remembrance Day. **Hatley Center:** Had a film demonstrating wood block printing. Donated money to the UNICEF party at school and to the Royal Canadian Legion, food sale held; exhibited at the county fair; members worked at the tearoom and assisted at the school fair. Roll call answered with a jar of jam or jelly for the Maplemount Home for Children. Money given towards scholarship in local high school. Mystery parcel sale held for Pennies for Friendship. **North Hatley:** Discussion rememorial scholarship in view of changes anticipated when regional school opens. There were representatives from all contributing organizations. **Stanstead North:** Roll call was answered by members paying a penny a waistline inch. Letter read from Mrs. Brenda Ryan of Stanstead, England. Successful rummage sale held, three boxes of good winter clothing was given to the Boundary Rotary Club for their clothing pool. Mrs. Miriam Osborne reported \$245 collected for UNICEF.



Mrs. Norman Hayward of Beebe was the guest speaker and spoke on her three years as a civil service teacher at the Manitoba school for retarded children and adults. There are 1,000 retarded persons at the school, ranging in age from 6 to 78 years. The school is under government control, but is almost self-sufficient. Everything that can be grown is grown there. They have a herd of cows, so butter and cheese is made. They have their own pasteurization plant; there is a modern laundry and several workshops. Music plays a great part in student training. Mrs. Hayward was thanked and presented with a china cup and saucer by Mrs. Geneva Lyons, convenor of welfare and health.

**VAUDREUIL: Cavagnal:** Cavagnal entertained the teachers of the high and intermediate schools at a tea. They have also held a centennial tea and bridge. An added attraction was a Canadian exhibition and bazaar, with articles for sale. **Harwood:** Harwood enjoyed a talk by Mrs. Trevor Smith, a member of the dietary staff of the Lakeshore General Hospital. Mrs. Smith described briefly the various departments of the hospital, then explained more fully the planning and working of the dietary department; a most interesting and informative talk and much appreciated by all present. A sum of money was voted for the purchase of material to be used to make up layettes to be donated to the Unitarian service fund. The November meeting featured publicity under the convenorship of Mrs. Prinn. A quiz 'Rate Yourself for 100 Points' was used and prizes to those rating highest. Various items of interest to W.I. members were read. 'Canadian Panorama', a trip across Canada from Cape Breton to Vancouver Island by means of slides taken by a member on trips across the country was enjoyed. It was decided to meet in the afternoons to complete the making of layettes that are to be given to the Unitarian Service Fund.

## From the Office

The Executive are pleased to announce that Mrs. H. L. Cass, a former Prov. Convenor of Welfare & Health, has accepted the nomination of 2nd Vice-President to complete the term to June, 1968, of Mrs. Beattie who resigned. In June the office comes up for election.

## The Canadian Constitution

In the President's recent letter to branch presidents, it was suggested

that, considering all the arguments, debates and resolutions etc, concerning our Constitution, our members should be interested in reading it for themselves. As soon as copies are procured, they will be sent to all citizenship convenors. Watch for them and make yourselves informed.

## President Reports

In the August/September issue of The Countrywoman our President of ACWW, Mrs. Aroti Dutt, gives a fascinating account of her visit 'Nepal to the Cameroons'. I had read of the Fon of Bafut in a book by a naturalist and thought it might be a fictional character, but here he is. I also read somewhere that his wives had a WI all their own. Mrs. Dutt writes . . . "We were late by three hours, but nearly a thousand women were waiting at the Bali airport under the strong tropical sun. They sang and danced, while I met the important members of the Women's Institutes and the tribal chiefs.

"The red earth road to Bamenda wound its way through the lowland forest the giant trees standing in solid ranks alongside and their branches entwined in an archway of leaves above us. The guest house at Bamenda was situated on top of a hill, with a beautiful view of the surrounding countryside. The open meeting at the stadium was attended by over a thousand people. The evening ended with a ball, where everyone danced 'High Life', the popular dance of West Africa. Next morning we called on the Fon of Bafut, who is a charming old man and is reported to have 45 wives. Women all over the Cameroons are extremely hard working; they work not only at home but also in the farms and on agricultural land. Fon's wives are no exception. At Fon of Bafut's home, surrounded by thick forest with the 'Juju' house in the background, I felt I came to a world, which modern jet age has left long behind. We also called on Fon of Makong and Bali the tribal heads of the area, who are helping the women's institutes movement in many ways. We visited a hospital, an exhibition of beautiful local handicrafts done by the WI members, and a local corn mill society. Next morning we left for Buea, the capital of West Cameroon and another warm reception at the airport. I met the prime minister and then attended the big rally of thousands of institute members on the occasion of Women's Day. They marched in their different uniforms, they played games and danced; it was difficult to believe that the movement is only three years old."

## The Branch President's Job

To make sure your members are kept up-to-date with their bigger organizations, FWIC and ACWW:

1. All literature (especially letters) should be carefully read *before* the meeting, so that important points can be given to the members, if there isn't time to read all of it to them. This also applies to FWIC and our own QWI Board and Convention Reports.

2. There should be subscriptions taken out by members for both Federated News and The Country Woman. The President and Convenors need them, and their subscriptions might justifiably be taken from the funds.

There is really an appalling ignorance of subjects taken up by FWIC and ACWW which affect us, but what is most important is that many members don't seem to have the vaguest understanding of matters discussed at our own Board and Convention meetings. This is the responsibility of the branch president. Unfortunately, branch presidents aren't always delegates to these meetings and as the delegates seem sometimes to bring back rather confused ideas as to the business taken up, the branch president should get all these points clarified for the benefit of her members. Her county president is usually at the meetings and should be able to answer any questions. If not, the branch president should contact the QWI office direct, or a member of the Executive.

*Mrs. F. B. Mayhew, Scotstown W.I., with guest and pen-friend from England.*







At left, standing, is Mrs. Margaret Abbott and seated in wheelchair is Mrs. Charles Bliss. Each was presented with 25-year pin at the October meeting by Mrs. Douglas Cooper, president of North Stanstead W.I.

## The Travelling Quilt

The first prize winner in the QWI Centennial Quilt contest and which was pictured in October's Journal, has had a colorful life since Convention. Its maker, Mrs. M. Dewar, tells us it, spent the summer on display in the window of the Canadian Handicraft Guild, Montreal. From there it went to Morin Heights, having been purchased by the Rev. Horace Baugh for his quilt collection.

## BEWARE! It's Poison

Every day in our newspapers we read the tragic lines that some child has been accidentally poisoned. The most terrible part of the story is the fact that accidents ARE preventable. With care and caution, none of these things need have happened. Each of us must ask himself the questions "Am I guilty of carelessness with poisons or in the care of medicines? Do I protect my family against accidents such as these?"

Medicine has made great advances in aid of mankind's ills, yet these very aids, not properly used, can be the

cause of accidental poisoning. Take the ordinary headache tablet — it is the most common child-poisoner of them all and yet, when used as directed, it has been a boon to sufferers for over fifty years. This great pain reliever is the cause of more children being poisoned than any other single medicine. Small children can't read labels, often can't distinguish tastes, and like the color of medicines. And, of course, they are great experimenters. Therefore it is up to us to protect them the hazards of ALL medicines. Perhaps there is much to be said in favor of the ill-tasting remedies of grandmother's time. After the bitter dose we received, we could always count on a special sweet, a sugared date, or a handful of raisins. Perhaps we defeat our own ends by making medicines too palatable.

Other household items are also very attractive to the young child. These include washing powders, chlorine bleaches, lye, toilet bowl cleaners, and window cleaning sprays. These modern servants in cans and bottles should never be left where they can fall into the hands of the little ones. Keep them out of reach and your youngsters out of harm's way.

The beauty aids may also be lethal to the toddler. Hair spray, deodorant,

yes, even that luscious-looking lipstick can cause a great deal of harm. A good rule to follow is, be beautiful but be careful.

Among the less common offenders are the paint removers, turpentine, coal oil and cleaning fluids: some of these being not only dangerous when taken by mouth, but also inflammable. What protective measures are YOU using in the handling and storing of these items?

As our technology increases, the list of poison hazards grows longer and therefore our list of safety precautions must grow longer, too.

Here are some suggestions which may take a little time but prevent a lot of grief:

1. TEACH youngsters that nothing goes into the mouth but food.

2. Store all cleaning aids away from the curious eyes and eager hands of toddlers.

3. Never give medicine to one child which has been prescribed for another. Never give medicine in the dark, never increase the prescribed dosage

4. Be sure that medicines are all properly labelled and safely locked away in the medicine cabinet.

4. Check your basement, garage, shed and barn to see that harmful items are out of the children's reach. It may take a minute more to get them ready for use but that minute could mean a lifetime of a young child.

6. Be prepared. Should an accidental poisoning occur in your home, call your doctor at once. Explain the situation and try to give as much information about what the child took, such as the amount, the main ingredients, or the use of the medicine or product, and the time that has elapsed since the accident happened. If the doctor cannot be contacted, call: POISON CONTROL CENTER, MONTREAL CHILDREN'S HOSPITAL, MONTREAL. This call may be made collect from anywhere in the province.

7. First, last and always, TAKE CARE.

Anne K. Nadeau

Convenor

Welfare and Health

Quebec Women's Institute



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## Two Books

We have in the Office some copies of the new "Heritage of Canadian Crafts", the Centennial project of FWIC. This is a very fine book and would make an excellent gift for a WI member you wish to honor. There is a section allotted to each province and Quebec has a chapter — extracts from "Quebec Mosaic" by Mrs. Arthur Coates.

Mrs. Coate's full account of Quebec crafts is our own "Quebec Mosaic", which is now at the printer's and which we hope to have for sale before Christmas. Twenty copies will be sent to each county president whose county has over six branches and ten to each of the rest. More of course can be ordered.

As this is our own centennial project, we are sure you will all give it plenty of publicity, not only among the members, but to other outlets such as historical societies, libraries, tourist shops, etc. It should sell itself, as Mrs. Coates has written a most interesting book, it is full of pictures, and it is very inexpensive.

## NOTES

*From Mrs. Carlton-Smith, Chairman Lady Aberdeen Scholarship Committee:*

... "Do make known to your groups our appreciation for their support and interest. Canada has really given us splendid help for which we are grateful"

"We are just now working on the study course for a Fijian woman who is going to Australia for a three months course. You cannot imagine what it does for these people to see the work and take part in it in a country where the work is so well organized. We get such splendid letters of appreciation. It is such a worthwhile program".

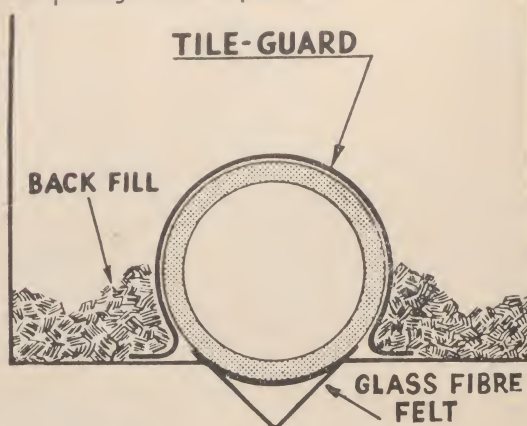
"Our Indian project (village training centers) was a great success and the remainder of their money was used to set up an agricultural college for their women, similar to the Lady Denman in England. . . ."

"I can assure you my committee are very careful how the money you kind people give us is spent. It has been wonderful that it has not meant less in Pennies for Friendship, as every year they have increased. . . ."

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